

**Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A cellulose ether having from 4,000 to 10,000 anhydroglucose repeat units and being substituted with
  - (a) on the average from 0.0003 to 0.08 moles, per mole of anhydroglucose unit, of a substituent comprising an alkyl or arylalkyl group having from 8 to 24 carbon atoms and
  - (b) a substituent having the formula II
$$[R^5R^6R^7R^8IC^+] (A^{z-})_{1/z}, \quad (II)$$
wherein  
 $R^5$ ,  $R^6$  and  $R^7$  each independently are  $-CH_3$  or  $-C_2H_5$ ,  
 $R^8$  is  $-CH_2-CHOH-CH_2-$  or  $-CH_2CH_2-$   
 $A^{z-}$  is an anion, and  
 $z$  is 1, 2 or 3.
2. (Original) The cellulose ether of claim 1 being a hydroxyethyl cellulose.
3. (Original) The cellulose ether of claim 2 comprising on the average from 1.0 to 3.0 moles of hydroxyethyl groups, per mole of anhydroglucose unit.
4. (Previously presented) The cellulose ether of claim 2 comprising on the average from 0.0005 to 0.07 moles of the substituent (a), per mole of anhydroglucose unit.
5. (Previously presented) The cellulose ether of claim 1 comprising on the average from 0.1 to 0.6 moles of the substituent (b), per mole of anhydroglucose unit.
6. (Previously presented) The cellulose ether of claim 1 having a viscosity of from 1,500 to 350,000 mPa's, measured as a 2 weight percent aqueous solution at 25 °C.

7. (Previously presented) The cellulose ether of claim 1 wherein the substituent (a) has the formula I



wherein

$R^1$  and  $R^2$  each independently are  $-CH_3$  or  $-C_2H_5$ ,

$R^3$  is  $-CH_2-CHOH-CH_2-$  or  $-CH_2CH_2-$

$R^4$  is an alkyl or arylalkyl group having from 8 to 24 carbon atoms, and

$A^{z-}$  is an anion, and

$z$  is 1, 2 or 3.

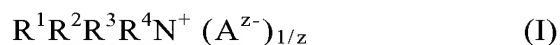
8. (Previously presented) The cellulose ether of claim 1 wherein the substituent (a) is derived from a glycidyl ether, an alpha-olefin epoxide, an alkyl halide or a mixture thereof comprising an alkyl or arylalkyl group having from 8 to 24 carbon atoms.

9. (Previously presented) The cellulose ether of claim 1 wherein the substituent (a) comprises an alkyl or arylalkyl group having from 10 to 24 carbon atoms.

10. (Original) The cellulose ether of claim 9 wherein the substituent (a) comprises a dodecyl group.

11. (Previously presented) The cellulose ether of claim 1 having from 6,000 to 8,000 anhydroglucose repeat units, comprising on the average from 1.5 to 2.5 moles of hydroxyethyl groups, per mole of anhydroglucose unit, and being substituted with

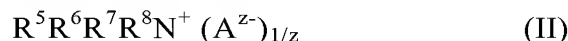
(a) on the average from 0.0005 to 0.07 moles, per mole of anhydroglucose unit, of a substituent having the formula I



wherein

$R^1$  and  $R^2$  are  $-CH_3$ ,  $R^3$  is  $-CH_2-CHOH-CH_2-$ ,  $R^4$  is a dodecyl group,  $A^{z-}$  is a halide ion and  $z$  is 1, and

(b) on the average from 0.15 to 0.35 moles, per mole of anhydroglucose unit, of a substituent having the formula II

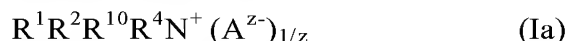


wherein  $R^5$ ,  $R^6$  and  $R^7$  are  $-CH_3$ ,  $R^8$  is  $-CH_2-CHOH-CH_2-$ ,  $A^{z-}$  is a halide ion and z is 1.

12. (Previously presented) A process for producing the cellulose ether of claim 1 comprising the step of reacting

a cellulose ether having from 4,000 to 10,000 anhydroglucose repeat units with

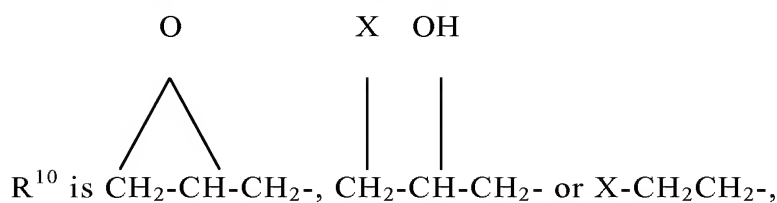
(a) a compound comprising an alkyl or arylalkyl group having from 8 to 24 carbon atoms and being selected from the group consisting of glycidyl ethers, alpha-olefin epoxides, alkyl halides, compounds of formula Ia and mixtures thereof



wherein

$R^1$  and  $R^2$  each independently are  $-CH_3$  or  $-C_2H_5$ ,

$R^4$  is an alkyl or arylalkyl group having from 8 to 24 carbon atoms,



$A^{z-}$  is an anion,

X is chloride and

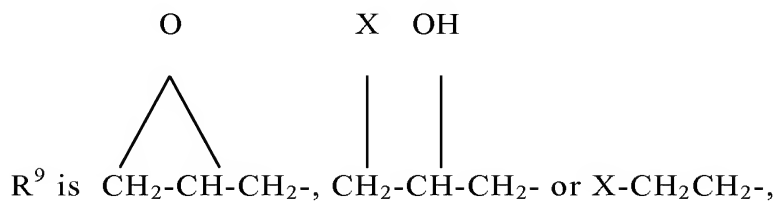
z is 1, 2 or 3; and

(b) a compound of formula IIa



wherein

$R^5$ ,  $R^6$  and  $R^7$  each independently are  $-CH_3$  or  $-C_2H_5$ ,



$A^{z-}$  is an anion,

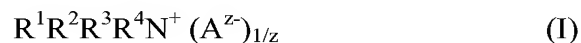
X is chloride and

z is 1, 2 or 3.

13. (Previously presented) A personal care composition comprising the cellulose ether of claim 1.

14. (Canceled)

15. (Previously presented) The cellulose ether of claim 2 wherein the substituent (a) has the formula I



wherein

$R^1$  and  $R^2$  each independently are  $-CH_3$  or  $-C_2H_5$ ,

$R^3$  is  $-CH_2-CHOH-CH_2-$  or  $-CH_2CH_2-$

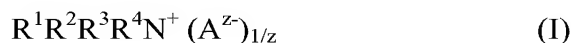
$R^4$  is an alkyl or arylalkyl group having from 8 to 24 carbon atoms, and

$A^{z-}$  is an anion, and

z is 1, 2 or 3.

16. (Previously presented) The process of Claim 12 for producing a cellulose ether of having from 6,000 to 8,000 anhydroglucose repeat units, comprising on the average from 1.5 to 2.5 moles of hydroxyethyl groups, per mole of anhydroglucose unit, and being substituted with

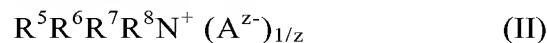
(a) on the average from 0.0005 to 0.07 moles, per mole of anhydroglucose unit, of a substituent having the formula I



wherein

$R^1$  and  $R^2$  are  $-CH_3$ ,  $R^3$  is  $-CH_2-CHOH-CH_2-$ ,  $R^4$  is a dodecyl group,  $A^{z-}$  is a halide ion and z is 1, and

(b) on the average from 0.15 to 0.35 moles, per mole of anhydroglucose unit, of a substituent having the formula II

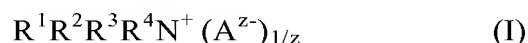


wherein  $R^5$ ,  $R^6$  and  $R^7$  are  $-CH_3$ ,  $R^8$  is  $-CH_2-CHOH-CH_2-$ ,  $A^{z-}$  is a halide ion and z is 1.

17. (Previously presented) The personal care composition of claim 13 in the form of a hair or skin care composition.

18. (Previously presented) The personal care composition of claim 17 comprising a cellulose ether having from 6,000 to 8,000 anhydroglucose repeat units, comprising on the average from 1.5 to 2.5 moles of hydroxyethyl groups, per mole of anhydroglucose unit, and being substituted with

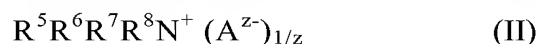
(a) on the average from 0.0005 to 0.07 moles, per mole of anhydroglucose unit, of a substituent having the formula 1



wherein

$R^1$  and  $R^2$  are  $-CH_3$ ,  $R^3$  is  $-CH_2-CHOH-CH_2-$ ,  $R^4$  is a dodecyl group,  $A^{z-}$  is a halide ion and z is 1, and

(b) on the average from 0.15 to 0.35 moles, per mole of anhydroglucose unit, of a substituent having the formula II



wherein  $R^5$ ,  $R^6$  and  $R^7$  are  $-CH_3$ ,  $R^8$  is  $-CH_2-CHOH-CH_2-$ ,  $A^{z-}$  is a halide ion and z is 1.